

Department of State Development

Identification of strategic mineral resource areas in South Australia

Greater Adelaide region and major regional centres

September 2015



MINERAL RESOURCES DIVISION

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Government
of South Australia

Department of
State Development

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Cover photo. Linwood Quarry showing the view north to crushing plant and Adelaide city area. (Photo 408319)

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Revision history

Version	Date	Comment
1	July 2015	This document has been prepared to assist in informing government in prioritising and identifying future land uses and development and extractive mining opportunities.
1.1	September 2015	Minor edits to Tables 1 and 2 and inclusion of additional strategic resource area in Table 2.

Contents

Shortened forms	4
Glossary.....	4
Introduction	5
Extractive industries in South Australia	6
Mining in the Greater Adelaide region	7
Why does South Australia need to identify strategic resource areas?	8
Environmental improvements.....	8
Economic improvements.....	9
Community improvements	9
What is a strategic resource area?	10
Criteria for determining strategic resource areas	11
Potential for urban encroachment or interface issues between resources operations and urban areas	11
Economic importance.....	11
Strategic extractive quarries in the Greater Adelaide region.....	12
Strategic extractive quarries near major regional centres	16
Strategic metallic and industrial mineral mines and quarries in the Greater Adelaide region.....	19
Strategic resource areas on SARIG	20
Mineral resource potential in the Greater Adelaide region	21
Further reading and resources	23
Updates.....	24

Shortened forms

EML	extractive minerals lease
EPA	Environment Protection Authority South Australia
MC	mineral claim
ML	mineral lease
MPL	miscellaneous purposes licence
PM	private mine
RAMP	resource area management and planning
RL	retention lease
SARIG	South Australian Resources Information Geoserver
SRA	strategic resource area

Glossary

Extractive minerals. The Mining Act 1971 defines extractive minerals as sand, gravel, stone, shell, shale or clay, but does not include—

- a) any such minerals that are mined for a prescribed purpose; or
- b) fire clay, bentonite or kaolin.

Incompatible land use. Incompatible land uses are those uses that may be particularly sensitive to the dust, noise and ground vibrations impacts of extractives production. Sensitive land uses include, but are not limited to: caravan park, community centre, consulting rooms, educational establishment, childcare centre, hospital, hotel, motel, nursing home, office, residential, recreation area or reserve, tourism activity.

Minerals. The Mining Act 1971 defines minerals as

- a) any naturally occurring deposit of metal or metalliferous ore, precious stones or any other mineral (including sand, gravel, stone, shell, coal, oil shale, shale and clay); or
- b) any metal, metalliferous substance or mineral recoverable from the sea or a natural water supply; or
- c) any metal, metalliferous ore or mineral that has been dumped or discarded—
 - i. in the course of mining operations or operations incidental to mining operations; or
 - ii. in other prescribed circumstances;

but does not include—

- d) soil; or
- e) petroleum or any other substance, the recovery or production of which is governed by the *Petroleum and Geothermal Energy Act 2000*

Mining tenement. A claim, lease or licence under the Mining Act 1971.

Planning system. South Australia's planning system controls land use and the physical development of the state. The legislation related to planning and development matters is contained in the *Development Act 1993* and associated regulations.

Introduction

The identification of strategic resource areas (SRAs) of key economic importance to South Australia will continue to support housing and construction affordability for urban development by maintaining access to construction materials.

With growing urban development, the South Australian Government has recognised the need to update and improve the way the state's planning and mining legislation and regulations interact, and share information at relevant stages. Such interaction is necessary to maintain ongoing access to long-life valuable construction materials and to minimise potential land-use conflicts between incompatible uses.

The Department of State Development and the Department of Planning, Transport and Infrastructure have undertaken the Resource Area Management and Planning (RAMP) project to determine how to best resolve these challenges. A project report was publicly released in July 2014 (GHD 2014). This project focused on extractive resources in the Greater Adelaide region and major regional centres and will implement complementary changes to the mining and planning systems to address complex and competing interests as urban areas expand.

This document delivers on a central recommendation of the RAMP project.

Exploring strategic opportunities to better deal with the external impacts that can arise from quarrying activities at the early approval stages of extractive operations will help to ensure the future economic prosperity of South Australia and the liveability of its communities.

This document will provide critical information to move forward in identifying those resource areas of key economic importance to government and South Australian communities.

This document is provided for informational purposes only. It will be made available to other state agencies and all local councils for consideration and wider government discussion when identifying strategic priorities and areas.

The document is an information tool. It is not intended, nor will it provide statutory protection for the identified SRAs. Nor will it preclude the use and development of land for other purposes. It is intended as one of a number of documents to assist in informing government in prioritising and identifying future land uses and development and extractive mining opportunities.

It is intended that this document be read in conjunction with other planning related documents including current development plans, advisory planning documents and guides, council strategic direction reports and local strategies. Queries relating to planning policy and extractive resources may be forwarded to the relevant areas within the Department of Planning, Transport and Infrastructure.

Extractive industries in South Australia

South Australia's local extractives sector is a significant industry with construction materials valued at \$171 million during 2014, and it generates broader economic activity in building and construction. Key construction materials found in South Australia include sandstone, sand, quartzite, limestone, dolomite, metasediments and calcrete.

The contribution our quarries and extractives sector make is crucial to the quality of lifestyle South Australians enjoy, whether it is the homes we build that provide shelter and enjoyment, the local roads we drive on, or the premises where we carry out our day-to-day business.

Large quantities of construction materials are also consumed each year to build and maintain the state's infrastructure of road, rail and port facilities.

Ensuring ongoing access to high quality, long-life construction materials underpins future growth and development in Adelaide.

The mining and resource sector's land use requirements include having good access to transport and freight corridors, maintaining access to any known mineral deposits, and preventing the encroachment of sensitive or incompatible uses.

The mining and resources policy of the *30-Year Plan for Greater Adelaide* (Department of Planning and Local Government 2010) states the government's intent to 'maintain access to known mineral deposits and minimise potential land-use conflicts between incompatible uses, particularly residential' and to 'preserve appropriate separation distances between mining and residential areas and other incompatible developments'. Other volumes of the Planning Strategy also contain similar policies.

Interface areas (buffers) would ideally be included within the boundaries of the approved quarries and mines, and appropriate controls are implemented to manage air and noise emissions from the site. However, for established operations and future operations in close proximity to urban areas, the identification of those economically important resources will provide further information for the state government in its overall strategic planning for both the protection of important resources and support for urban development.

Mining in the Greater Adelaide region

The Adelaide region has excellent geological resources. Industrial minerals, such as Cambrian marble used in soda-ash production, sand for glass manufacture and weathered shale for cement production, are important for local manufacturing industries. Copper, lead, zinc and gold mining have been historically important to the region and metallic mineral exploration and development is undergoing a revival, with new mines established in recent years.

Although this document has a strong focus on the extractives sector, industrial and mineral mines in the Greater Adelaide region have also been included for recognition as these resources are experiencing the same pressures as a result of land-use conflicts between incompatible uses.



Aerial view of Kanmantoo copper-gold mine. The mine is located ~45 km southeast of Adelaide within the Mount Barker District Council area. (Photo 409531)

Why does South Australia need to identify strategic resource areas?

The metropolitan area and regional centres of South Australia have a key economic advantage in the provision of lower cost construction materials. Extractives are a high volume, lower price commodity, and transportation costs can have a large impact on the final price that consumers pay for these materials.

To maintain supply of construction materials from resource areas at a reasonable cost to end users, it is vital that development that is potentially incompatible with existing extractives industry activities is identified through the extractive mining lease approval process. At this stage, it is important to consider any planning implications with surrounding zoning and envisaged land uses, with the view to minimise potential impacts through interface areas (buffers) around future extractive mining operations.

In addition, it is important to 'identify' those strategically important resources for the economic future and development of South Australia. Reflecting identified and critically important strategic resources areas in documents such as the Planning Strategy (the *30-Year Plan for Greater Adelaide* and region plans) will assist in informing the South Australian Government with its future prioritisation of urban growth areas and strategic planning.

In the absence of the identification of strategically important resources (SRAs) there is potential for urban encroachment to lead to the loss of opportunity to extract the resource into the future, increased prices for construction materials and a subsequent decrease in housing and infrastructure affordability.

The Productivity Commission's *Public Infrastructure* inquiry report released in May 2014 found that 'the exhaustion of existing quarries and/or inability to establish new quarries close to end markets is likely to have increasingly significant ramifications, given the considerable growth expected in the populations of major Australian cities over the next 50 years'.

It is vital that timely action is taken to recognise the importance of the extractives sector to the future of the state. The RAMP report and the identification of SRAs in South Australia will help to minimise conflicts from incompatible developments and preserve appropriate separation distances between quarry operations and residential areas, reducing future supply and pricing problems.

Giving recognition to our most strategically important resources will contribute positively to the environment, the broader economy and our communities:

Environmental improvements

- Resource operations' ability to adhere to legislation and industry standards are not compromised through the siting of incompatible developments.
- Planning documentation (i.e. strategic plans, mapping) includes more comprehensive information on existing and future resource activities – at state, regional and local levels.
- Future resource areas are planned for effectively and consistently ensuring ongoing access to construction materials.

Economic improvements

- The long-term sustainability of significant resource activities is secured across the state without compromising the need for, and investment in, urban development.
- Investor certainty in the state's resources and urban development sectors is improved.
- Material affordability for housing and infrastructure developments is supported.

Community improvements

- Community health, safety and wellbeing can be maintained to the highest standards.
- Community concern as a result of sensitive development locating near resource activities and the potential for interface issues are reduced.
- Improved confidence in the regulator (given that, perceived 'noncompliance' of resource operations, due to siting of incompatible developments, is reduced when effective planning controls are in place to prevent it).
- Effective planning may minimise heavy vehicle movements and reduce congestion on our roads.



Sellicks Hill quarry and crushing plant. (Photo 408652)

What is a strategic resource area?

A SRA is an area within the Greater Adelaide region or near a major regional centre (Fig. 1) that is of key economic value to South Australia due to the quantity or quality of construction materials or mineral resources that are extracted or contained within that area.

A SRA is also an area currently experiencing urban encroachment or incompatible development interface issues, or is likely to be experiencing such issues in the near future.

To this end, objective criteria have been established to identify these 'resources' that are of strategic importance to South Australia. Once identified, the Government of South Australia will work with local governments and industry members, on an individual basis, to ensure the impacts of quarrying and mining are minimised and the long-term future of the resource is enhanced and protected.

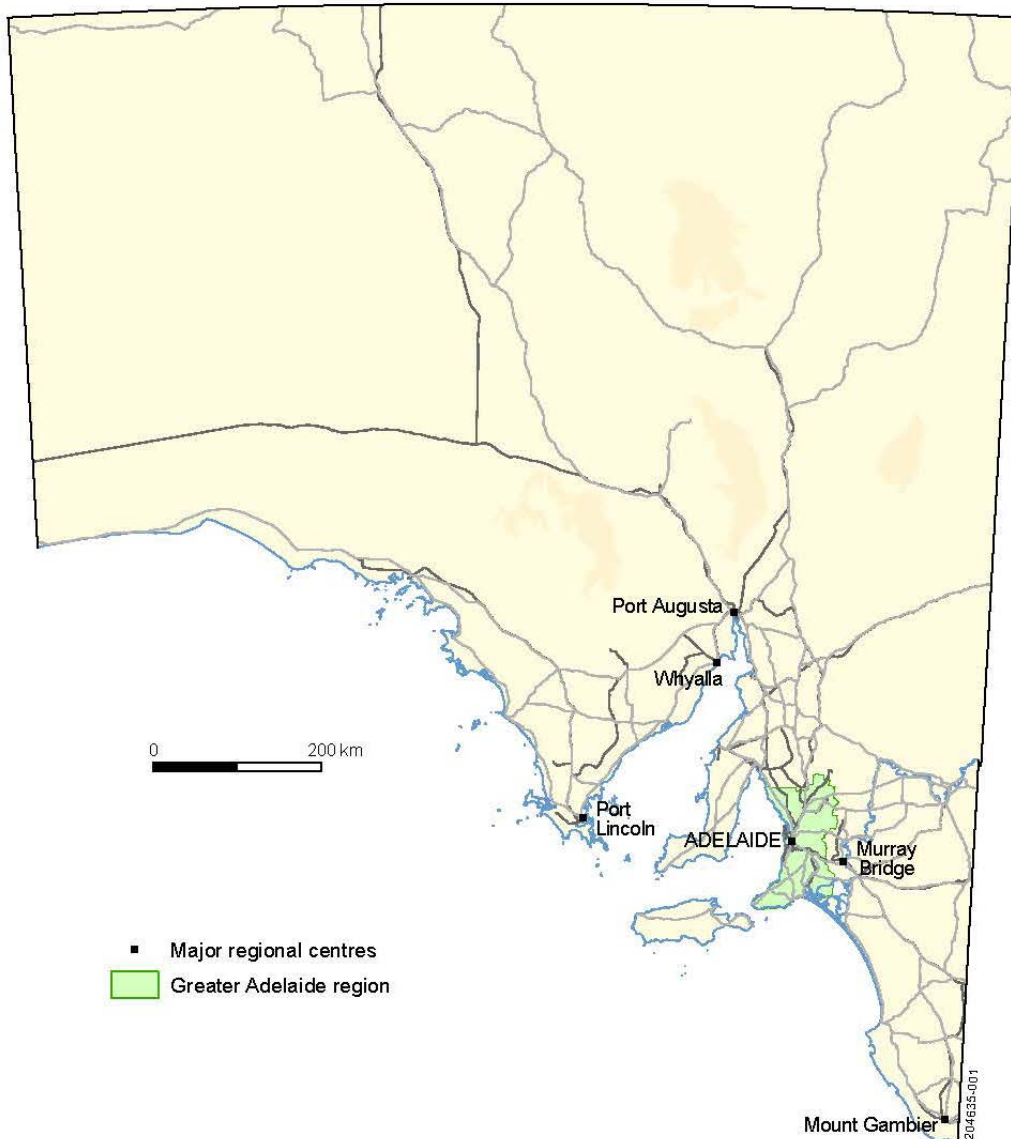


Figure 1 South Australia showing the Greater Adelaide region and major regional centres.

Criteria for determining strategic resource areas

Criteria used to define SRAs are based on two key issues:

- the potential for urban encroachment or interface issues between resources operations and the urban area
- an evaluation of the importance of the resources to the state's economy.

Potential for urban encroachment or interface issues between resources operations and urban areas

The list of quarries and mines in Tables 1–3 have been deemed to be of economic importance in the context of the following criteria:

- Are the surrounding and nearby existing and potential land uses sensitive to the impacts of quarrying, mining and associated activities (e.g. noise, dust, vibration)?
 - Sensitive land uses include, but are not limited to: caravan park, community centre, consulting rooms, educational establishment, childcare centre, hospital, hotel, motel, nursing home, office, residential, recreation area or reserve, tourism activity.
- Is the potential SRA located within an area or region identified for urban expansion within the South Australian Planning Strategy?
 - For example: planned urban lands to 2038 under the *30-Year Plan for Greater Adelaide*.
- Do potential land uses represent a significant investment that may result in it being uneconomic to extract the resource because the existing uses and infrastructure are too expensive to relocate?
 - For example: construction of buildings, dwellings or other infrastructure.

If the potential SRA is located within an area or region identified for urban expansion within the South Australian Planning Strategy then it will be a consideration and decision of the South Australian Government, in consultation with local government and industry, to allocate priority to its importance as a resource, its importance for future urban growth and/or its importance for some alternative use.

Economic importance

There are three categories of SRA:

1. strategic extractive quarries in the Greater Adelaide region
2. strategic extractive quarries near major regional centres
3. strategic metallic and industrial mines and quarries in the Greater Adelaide region.

These categories have been developed to reflect the differing size and nature of the resources and their location. The delineation of SRAs by the Department of State Development has developed from several major projects to evaluate current mining areas and map geological resource potential in the Greater Adelaide region and major regional centres (see 'Further reading and resources' for more information).

Strategic extractive quarries in the Greater Adelaide region

A quarry must meet **ALL** of the following criteria:

- a current mineral tenement in the Greater Adelaide region producing extractive minerals (construction materials) under the *Mining Act 1971* and any adjacent areas with significant potential for further resources

AND

- annual production (5-year average) of at least 250 000 tonnes

AND

- estimated in-ground resource of at least 2.5 million tonnes.

An **EXCEPTION** to the above criteria will be made if a quarry can meet the following criteria:

- annual production (5-year average) of at least 100 000 tonnes or estimated in-ground resource of at least 2.5 million tonnes

AND ONE of the following criteria:

- the deposit is capable of producing particular high quality materials of limited availability; materials considered here are:
 - high quality surfacing aggregates – bituminous sealing grade, asphaltic grade (Department of Planning, Transport and Infrastructure prequalified)
 - high performance (low shrink) concrete aggregate
 - coarse construction (concrete) sand
- OR**
- the deposit is the main or only source of the construction material for a region.

The strategic extractive quarries in the Greater Adelaide region are detailed in Table 1.

Table 1 Strategic extractive quarries in the Greater Adelaide region

SRA	Tenement holder	Tenement details	Commodity	Council area
Anstey Hill	P.E. Musolino – Anstey Hill Shale Pit	EMLs 3200, 3201, 3202	Shale	Adelaide Hills Council City of Tea Tree Gully
	CSR Building Products Ltd – Range Road South Pit	PM 201		
	Holcim (Australia) Pty Ltd – Highbury (Riverview) Quarry	PMs 31, 35, 309	Quartzite, dolomite	
Callington Quarry	The Paim Bruges Family Trust	PM 238 MCs 4134, 4135, 4234	Metasiltstone	District Council of Mount Barker
Golden Grove Extractive Industry Zone	Hallett Brick Pty Ltd	PMs 32, 56, 79, 81, 118, 206	Sand, clay, shale	City of Tea Tree Gully
	Rocla Pty Ltd	PMs 71, 76*	Sand, clay	
	CSR Building Products	EML 5892	Shale	
	Pondeen Pty Ltd	EML 5893	Sand	
Goolwa Quarry, Currency Creek	Goolwa Quarries Pty Ltd	EML 5483	Sand, clay, shale	Alexandrina Council
Hartley Quarry	Futuretop Developments Pty Ltd	EML 6271	Quartzite	Alexandrina Council
Kanmantoo Bluestone (Faulkner) Quarry	B.D. Faulkner	EML 5713	Calcrete/limestone	District Council of Mount Barker
Kapunda Quarry	Mantina Earthmovers & Constructions Pty Ltd	EMLs 5632, 6397	Dolomite	Light Regional Council
Light River, Kapunda	R.W. Norman and S.M. Norman	EML 5991	Dolomite	Light Regional Council
	Wellspring Wilpinna Pty Ltd	EML 5939		
Linwood Quarry	Boral Resources (SA) Pty Ltd	PMs 3, 4	Limestone	City of Marion
	Longfield Pty Ltd	PM 22 EMLs 5730, 5731, 5732 MC 3314		
Lobethal Quarry	Boral Resources (SA) Pty Ltd	PM 87 EMLs 4603, 5589, 5770, 6319	Metasiltstone	Adelaide Hills Council
Maslin Beach Extractive Industry Zone	Rocla Pty Ltd	PMs 20, 43 EMLs 5767, 5964,	Sand	City of Onkaparinga
	Hanson Construction Materials Pty Ltd	PM 232		
	Sandscope Pty Ltd	PMs 17, 161, 244, 289		
	Southern Waste Resourceco Pty Ltd	PM 65 EML 5217		
	B.F. Martin Pty Ltd	PM 275		

SRA	Tenement holder	Tenement details	Commodity	Council area
McLaren Vale Quarry, Noarlunga	W.W. Oliver McLaren Vale Properties Pty Ltd	PMs 61, 303 EMLs 5272, 5273	Limestone	City of Onkaparinga
Monarto Quarries (Hartley area)	District Council of Mount Barker	EMLs 4400, 4401, 4402, 4403, 4404, 6081, 6118, 6328	Calcrete, limestone	Alexandrina Council
Montacute Quarry	Holcim (Australia) Pty Ltd	PMs 135, 136, 137, 147	Dolomite	Adelaide Hills Council
Mount Compass	Sibelco Australia Limited Berry Sands Pty Ltd Sand & Loam Pty Ltd Springvale Estates Pty Ltd	EML 5465 (ML 5327) MCs 3359, 3360 EML 5105 EMLs 5521, 5199 EML 5540	Sand	Alexandrina Council District Council of Yankalilla
Nain	Kara Resources Pty Ltd	EML 5686 MC 4322	Metasediment	Light Regional Council
One Tree Hill	CSR Building Products Ltd E.W. Ross	PM 88 PM 133 EML 4493	Sand, clay, shale	City of Playford
Para Hills Quarry	Boral Resources (SA) Pty Ltd	PM 227	Quartzite	City of Salisbury
Penrice Quarry	Adelaide Brighton Cement Ltd D.W. & J.A. Rawlings Seelander Stone and Sand Supplies – Kalimna Road Quarry	PMs 86, 120 ML 6233 RL 109 MPLs 75, 118 PMs 101, 102, 104 EMLs 4695, 6138, 6057	Marble, metasiltstone, sand	Barossa Council
Reynella Quarry	Boral Resources (SA) Pty Ltd Longfield Pty Ltd	PMs 48, 107 PM 222	Limestone	City of Onkaparinga
Rosedale Quarry	Bowjen Nominees Pty Ltd K.E. Jennings	EMLs 4800, 4801, 4802, 4805, 4806 EMLs 6440	Dolomite	Barossa Council
Rowland Flat Extractive Industry Zone	Rocla Pty Ltd Holcim (Australia) Pty Ltd M.B. Coleman	PMs 196, 192, 93 EML 5763 PM 27 EML 6132	Sand	Barossa Council Light Regional Council
Salisbury Quarry	Boral Resources (SA) Pty Ltd	PM 2	Quartzite	City of Playford

SRA	Tenement holder	Tenement details	Commodity	Council area
Sandy Creek	Trenel Pty Ltd	EMLs 5328, 5982, 5983, 5984, 5985	Sand	Barossa Council
	Sloans Sands Pty Ltd	PM 131, EML 5513		
	Berrett J.L.	PM 274		
	M.N. Geue	PM 94		
	A.R. Giannitto	PM 229		
	K.A. Southern and S.A. Southern	PM 113		
	Burge Corp. Pty Ltd	PM 179		
Sellicks Hill Quarry	Premier Resources Limited	PMs 163, 237	Limestone	City of Onkaparinga District Council of Yankalilla
	Southern Quarries Pty Ltd	EML 5440		
Stonyfell/Greenhill Quarry	Boral Resources (SA) Pty Ltd	PMs 1, 6, 7	Quartzite	Adelaide Hills Council City of Burnside
Tooperang*	W.S. Meyer	EMLs 5331, 5864 MC 4289	Sand	Alexandrina Council
Victor Harbor Quarry	Holcim (Australia) Pty Ltd	PM 197 EML 4859	Metasiltstone	City of Victor Harbor
White Rock Quarry	Hanson Construction Materials Pty Ltd	PM 188	Quartzite	Adelaide Hills Council City of Burnside

* Also qualifies as a SRA under the 'strategic metallic and industrial mineral mines and quarries in the Greater Adelaide region' category; see Table 3).

Strategic extractive quarries near major regional centres

Major regional centres are cities and rural cities located outside of the Greater Adelaide region. These are Mount Gambier, Murray Bridge, Port Augusta, Port Lincoln and Whyalla.

A quarry must meet **ALL** of the following criteria:

- a current mineral tenement linked to the Greater Adelaide region or a major regional centre producing extractive minerals (construction materials) under the Mining Act 1971 and any adjacent areas with significant potential for further resources

AND

- annual production (5-year average) of at least 80 000 tonnes

AND

- estimated in-ground resource of at least 1.5 million tonnes.

An **EXCEPTION** to the above criteria will be made if a quarry can meet the following criteria:

- annual production (5-year average) of at least 50 000 tonnes or estimated in-ground resource of at least 1.0 million tonnes

AND ONE of the following criteria:

- the deposit is capable of producing particular high quality materials of limited availability; materials considered here are:
 - high quality surfacing aggregates – bituminous sealing grade, asphaltic grade (Department of Planning, Transport and Infrastructure prequalified)
 - high performance (low shrink) concrete aggregate
 - coarse construction (concrete) sand
- OR**
- the deposit is the main or only source of the construction material for a region.

The strategic extractive quarries near major regional centres are detailed in Table 2.

Table 2 Strategic extractive quarries near major regional centres

SRA	Tenement holder	Tenement details	Commodity	Council area
Ardrossan	One Steel Manufacturing (Arrium)	PM 291 MLs 4040, 4041, 4042, 4044, 4045, 4046, 5317 MPLs 46, 132	Dolomite - industrial	District Council of Yorke Peninsula
Clinton	M.P. Kenny and M.T. Kenny	EML 5766	Sand (concrete)	District Council of Yorke Peninsula
	Clinton Quarries	EML5792		
	S C Heinrich & Co Pty Ltd	EMLs 5901, 6410		
	Southern Quarries	EML 6407		
Farrell Flat	S C Heinrich & Co Pty Ltd	EML 6198	Siltstone	Clare & Gilbert Valleys Council
Klein Point	Adelaide Brighton Cement Ltd	MLs 2912, 3028, 3029, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3349, 3350, 3351, 3352, 3354, 3353, 3355, 3356, 3357, 3358, 4012, 4013, 4014, 4015, 5881 RLs 27, 28 MPL 11	Limestone – industrial	District Council of Yorke Peninsula
Kulpara	Holcim (Australia) Pty Ltd	PM 251	Sand (concrete)	District Council of Barunga West
Kulpara & Wakefield	Kara Resources Pty Ltd	EMLs 6074, 6090, 6179, 6180	Dolomite, quartzite	District Council of Barunga West
Loxton	Schleins Quarries Pty Ltd	EMLs 4841, 5566, 5831	Limestone	District Council of Loxton Waikerie
Mt McIntyre Quarry	Boral Resources (SA) Pty Ltd	EML 3243	Basalt	Wattle Range Council
Mintaro	Mintaro Slate Quarries	PM 124	Slate	Clare & Gilbert Valleys Council
Mt Monster (Keith)	R.A. Tenney and S.P. Matthews	MC 3631	Rhyolite	Tatiara District Council
	J. Woodall	PM 173		
Murray Bridge Quarry	Boral Resources (SA) Pty Ltd	PM 174 EMLs 5149, 5556, 5897 MPL 136	Gneiss	Rural City of Murray Bridge
Paringa (Renmark)	Ariverrun Pty Ltd Scherer Contractors Pty Ltd	EMLs 5765, 5834, 5835, 5988, 6207, 6254	Calcrete	Renmark Paringa Council
Port Augusta (Stirling North)	Boral Resources (SA) Pty Ltd	PM 154	Quartzite Creek gravel	Port Augusta City Council
Port Lincoln	McDonald Earthmovers Pty Ltd	PM 181 EMLs 5111, 5479, 5480	Granitic gneiss	District Council of Lower Eyre Peninsula
Price (Crowell)	Premier Resources Ltd	PM 243	Sand (concrete)	District Council of Yorke Peninsula
	Southern Quarries	EML 6035		

SRA	Tenement holder	Tenement details	Commodity	Council area
Price (Ocsalt)	Ocsalt Pty Ltd	MLs 94, 95, 483, 484, 493, 531, 552, 553, 556, 557, 588, 589, 596, 615, 616, 5043, 5069, 5070, 5071, 5072, 5073, 5277, 5278, 5279	Salt (solar)	District Council of Yorke Peninsula
Spalding	Clare Quarry Pty Ltd	EML 5705	Dolomite	Northern Areas Council
Tailem Bend	HF Betts & Co	EMLs 5993, 6329	Calcrete	Coorong District Council
Truro	Topcoat Asphalt Contractors Pty Ltd	EML 6408	Quartzite	Mid Murray Council
Waterloo (Kruse)	Kruse Quarries Pty Ltd	PM 301	Siltstone	Clare & Gilbert Valleys Council
Whyalla (Mt Laura)	The Corporation Of The City Of Whyalla (Boral)	EMLs 4778, 4779, 4780, 4781	Metasiltstone	City of Whyalla
Whyalla (Mt Young)	Quality Sand & Landscape Supplies	EML 4104	Quartzite, sandstone	City of Whyalla

Strategic metallic and industrial mineral mines and quarries in the Greater Adelaide region

A mine or quarry must meet **ALL** of the following criteria:

- a current mineral tenement producing metallic or industrial minerals, exclusively or in conjunction with the production of extractive minerals, under the Mining Act 1971, and any adjacent areas with significant potential for further resources

AND ONE of the following criteria:

- annual production value (5-year average) of at least \$2.5 million or in-ground resource sufficient for 10 years production (\$25 million value).
- production value less than \$2.5 million if operation/resource is integrated with a significant manufacturing or export industry within the state.

The strategic metallic and industrial mineral mines and quarries in the Greater Adelaide region are detailed in Table 3.

Table 3 Strategic metallic and industrial mineral mines and quarries in the Greater Adelaide region

SRA	Tenement holder	Tenement details	Commodity	Council area
Angas Zinc Mine	Terramin Australia Ltd	ML 6229	Zinc, Lead, Silver	Alexandrina Council
Bird In Hand Gold Deposit	Maximus Resources	MC 4113	Gold	Adelaide Hills Council
Birdwood Clay Pit	Adelaide Brighton Cement Ltd	PM 231 MLs 2917, 2951, 2994, 5280, 4661, 6182 MPL 50 EMLs 4702, 4703	Cement Shale	Adelaide Hills Council
Dry Creek Salt Fields	Port Gawler Investments Pty Ltd Ridley Dry Creek Pty Ltd	PM 77 PMs 199, 248 MLs 234, 235, 237, 357, 358, 359, 360, 361, 389, 390, 391, 392, 404, 405, 406, 416, 417, 418, 421, 429, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 587, 600, 605, 606, 607, 608, 617, 618, 702, 5205, 5206, 5207, 5208, 5209, 5210, 5908	Salt (solar)	City of Playford City of Salisbury District Council of Mallala
Kanmantoo Copper Mine	Hillgrove Copper Pty Ltd	MLs 6345, 6436 EML 6340	Copper, gold	District Council of Mount Barker
Moculta Shale Quarry	Adelaide Brighton Cement Ltd	MLs 4887, 4888, 4889, 5874, 5875	Cement shale	Barossa Council Mid Murray Council

Strategic resource areas on SARIG

The Mineral Resources Division has developed a SRAs layer that can be viewed on the South Australian Resources Information Geoserver (SARIG) <www.statedevelopment.sa.gov.au/sarig>.

SARIG provides up-to-date views of mineral, petroleum and geothermal tenements and other geoscientific data (includes the Strategic Resource Areas spatial layer). You can search, view and download information relating to minerals and mining in South Australia including tenement details, mines and mineral deposits, geological and geophysical data (includes mineral resource potential maps), and publications and reports.

To view the Strategic Resource Areas layer in SARIG, on the Map Layers menu, go to Land Access, Land Use, and select Strategic Resource Areas (Fig. 2). To view information about the local government area that the SRAs are located in, also select Local Government Areas.

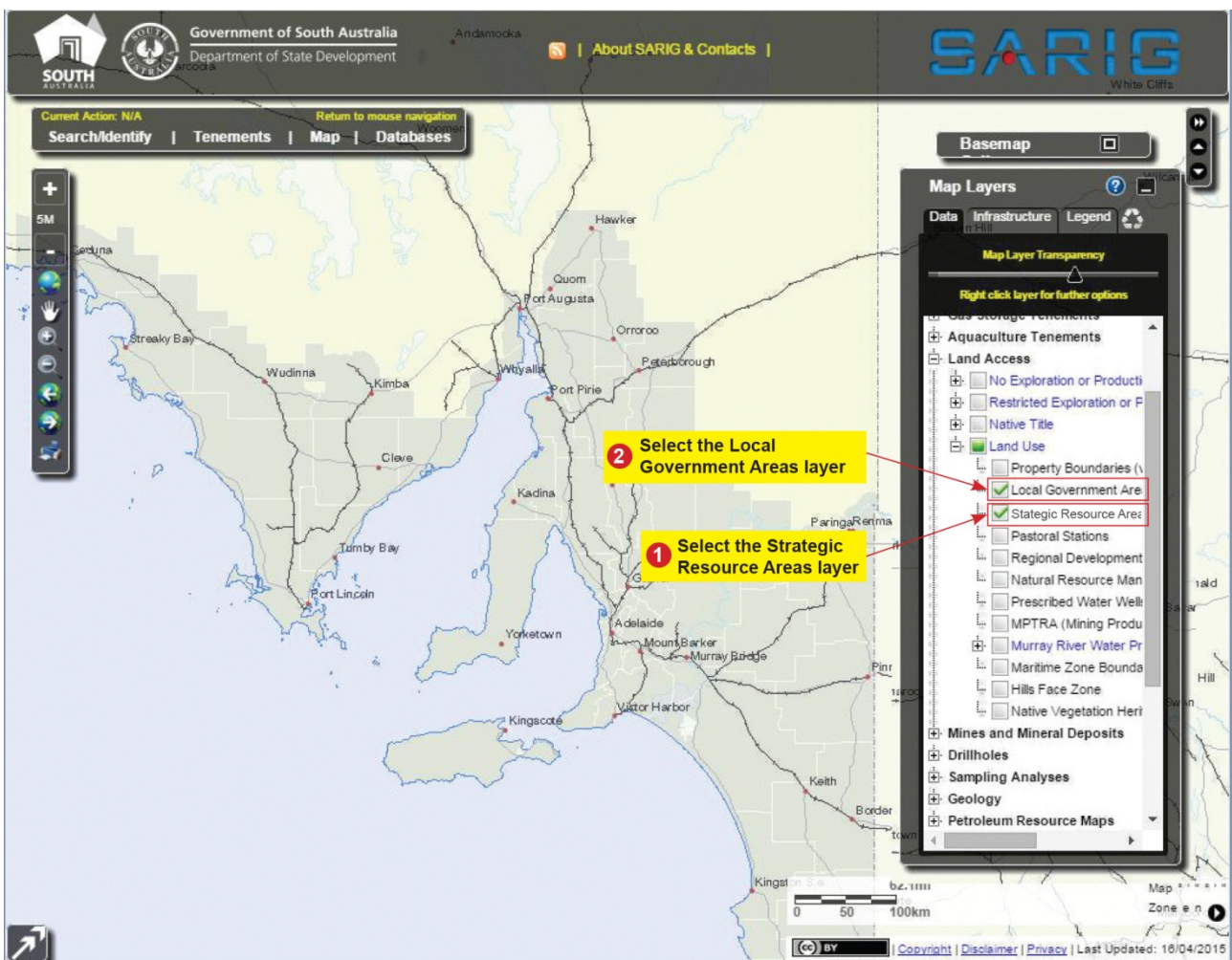


Figure 2 SARIG screenshot showing the steps to view the Strategic Resource Areas layer.

Mineral resource potential in the Greater Adelaide region

The Geological Survey of South Australia has developed a mineral resource potential mapping system to assist land use planning in relation to significant mineral resource and mine operation areas. The mapping is particularly relevant to planning of residential and other developments that are incompatible with mining operations, but will also assist with a wide range of other land use planning matters. Construction materials are a particular focus but industrial, metallic, energy and gem minerals are also considered.

The system categorises areas according to their interpreted mineral resource potential and suggested planning response. The mapping has already been used in consideration of mineral resources for the preparation of the *30-Year Plan for Greater Adelaide* and in other planning matters.

Thirty-one mineral resource potential maps at 1:50 000 scale are now available as PDFs for most of the Greater Adelaide region (Figs 3, 4). The maps are available for download via [SARIG](#); on the Map Layers menu, go to Geology, Mineral Resource Potential Maps. Hard copies can be purchased from Department of State Development Customer Services, phone +61 8 8463 3000, email <Resources.CustomerServices@sa.gov.au>, for \$20 plus postage and handling.

Information about operational quarries, mines and prospective mineral areas can also be found on [SARIG](#).

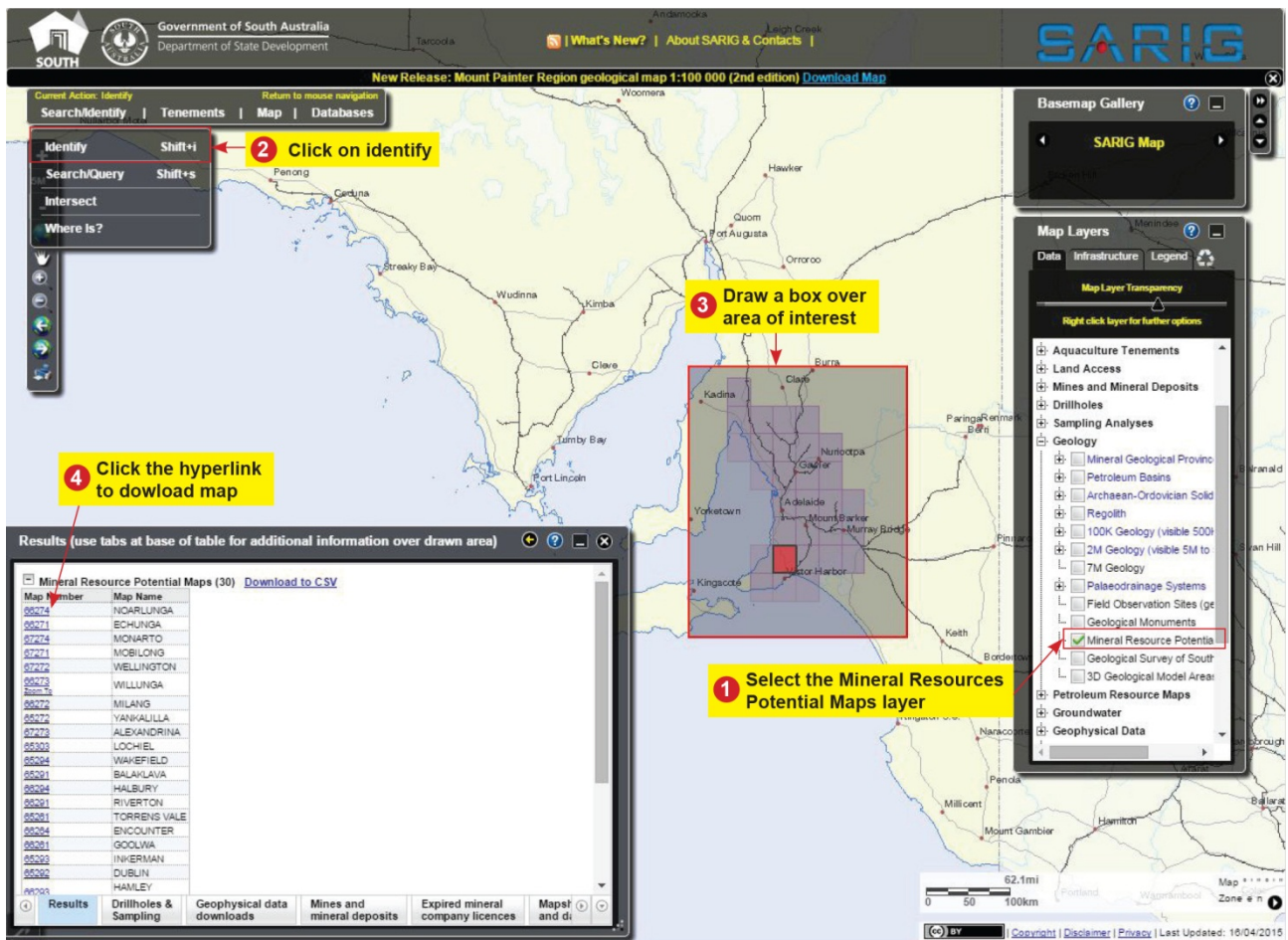


Figure 3 SARIG screenshot showing the steps to download mineral resource potential maps.

Further reading and resources

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Updates

The listing of SRAs in this document will be subject to change as required. If you believe that your quarry or mine meets the SRA criteria but it has not been listed, please contact the Department of State Development. Evidence of quality of resources, such as test results, may need to be provided to support your claim.

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“The identification of strategic resource areas of key economic importance to South Australia will continue to support housing and construction affordability for urban development by maintaining access to construction materials.”



Para Hills Quarry, (photo 414537)